

PATENT

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01/17/04

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:  
Ahrens, et. al.

Serial No.: 09/801,603

Filed: March 8, 2001

Title: System and Method for Reporting  
Platform Errors in Partitioned  
Systems

§ Group Art Unit: 2184  
§  
§  
§ Examiner: Wilson, Yolanda  
§  
§ Attorney Docket No. AUS920000923US1  
§  
§ IBM Corporation  
§ Intellectual Property Law Dept.  
§ 11400 Burnet Road  
§ Austin, Texas 78758

DECLARATION UNDER 37 C.F.R. § 1.131

Hon. Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

Arthur James Tysor declares as follows:

1. I am an Applicant for the patent application entitled "System and Method for Reporting Platform Errors in Partitioned Systems," Serial No. 09/801,603, filed March 8, 2001, and an inventor of the subject matter described and claimed therein.
2. Prior to March 1, 2001, I completed and reduced to practice, in the United States of America, the invention described and claimed in the subject application, as evidenced by the following:
  - a) I submitted IBM Invention Disclosure Form No. AUS8-2000-1498, attached as Exhibit A hereto, which describes the invention described and claimed in the subject application.
3. Each of the dates deleted from Exhibit A is prior to March 1, 2001.

Docket No. AUS920000923-US1

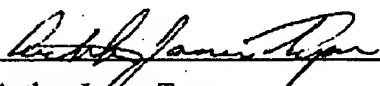
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Atty Ref. No. IBM-1014

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4. I further declare that all statements made herein of my own knowledge and all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful and false statements and the like so made are punishable by fine or imprisonment or both under § 1001 of Title 18 of United States Code and that such willful and false statements may jeopardize the validity of the above-referenced application and any patent issuing therefrom.

FURTHER DECLARANT SAYETH NOT.

  
Arthur James Tysor

Date: 12/30/03

# Exhibit “A”

QUS920000923US

**Disclosure AUS8-2000-1498**

Prepared for and/or by an IBM Attorney - IBM Confidential

Created By: Arthur Tysor Created On: 02:08:24 PM

Last Modified By: Nancy Werchan Last Modified On: 09:27:44 AM

Required fields are marked with the asterisk (\*) and must be filled in to complete the form.

**\* Title of disclosure (in English)**

Platform Error Reporting on Complex Partitioned Systems

**Summary**

Status	Under Evaluation
Processing Location	AUS
Functional Area	3P - SD - DEVELOPMENT AIX/6000
Attorney/Patent Professional	Volel Emile/Austin/IBM
IDT Team	Rick Poston/Austin/IBM; Gerald McBrearty/Austin/IBM; Kenneth Banning/Austin/IBM; Johnny Shieh/Austin/IBM; Thomas Weaver/Austin/IBM; Kim Tran/Austin/IBM; Arthur Tysor/Austin/IBM; Deanna Brown/Austin/IBM; Alan MacKay/Austin/IBM; Dwip N Banerjee/Austin/IBM
Submitted Date	11:22:05 AM EST
Owning Division	SD
Incentive Program	
Lab	
Technology Code	
PVT Score	No PVT score has been calculated. To calculate a PVT score, press the 'Calculate' button.

**Inventors with Lotus Notes IDs**

Inventors: Arthur Tysor/Austin/IBM, Doug Benignus/Austin/IBM, George Ahrens/Austin/IBM

Inventor Name	Inventor Serial	Div/Dept	Inventor Phone	Manager Name
> Tysor, A.J. (Arthur)	549617	7T/CVRS	678-3434	Knighton, J.A. (Jim)
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Ahrens, George H.	600691	7T/CURS	678-1184	Marcum, R.W. (Roger)

> denotes primary contact

**Inventors without Lotus Notes IDs****IDT Selection**

Select Function Area

IDT Team:

Attorney/Patent Professional:

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Rick Poston/Austin/IBM  
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 Johnny Shieh/Austin/IBM  
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 Arthur Tysor/Austin/IBM  
 Deanna Brown/Austin/IBM  
 Alan MacKay/Austin/IBM  
 Dwip N Banerjee/Austin/IBM

Volel Emile/Austin/IBM

Response Due to IP&L : 

**\*Main Idea**

1. Describe your invention, stating the problem solved (if appropriate), and indicating the advantages of using the invention.

Large complex computer systems are capable of being logically partitioned into smaller partitions, each running their own copy of an Operating System. This configuration is referred to as an LPAR environment. Each Operating System across the various partitions can be different, or the same. The problem that this disclosure will address is "How does the platform report global errors to each of the partitions so it can be processed in an efficient manner."

Each logically partitioned system can be 'leased' out to different companies or areas within the same company for their usage. Each partitioned system could be running their own version of a supported Operating System for that platform. Hardware within the system is normally divided out to each partition for their usage. However, there are some hardware components, i.e. fans, power supplies, memory, etc. that must be shared by all partitions. Hardware problems in these components are globally reported to all partitions. Once the problem is reported to the OS it must process it. Processing may include 1) analyzing the problem and creating a problem report, 2) reporting the problem to the partition user, 3) doing a call home and reporting the problem to the service vendor. In an LPAR environment this will result in each partition reporting the same problem. Duplicate reporting of the same problem results in wasted service time and potential usage of additional FRUs thus increasing warranty and maintenance costs.

This disclosure introduces the "ARF" flag, which stands for Already Reported Flag. This flag will be set to off when the first operating system requests status from the platform, and then turned on for all subsequent 'scans' by the other partition operating systems. The flag allows OSs to alter their processing of globally reported errors in the case where it has already been reported to another partition. The OS may choose to discard all errors that have already been reported or it may choose to provide customer options for the handling of these errors. Examples of customer options include: 1) do nothing, 2) only report these errors when problem determination procedures are manually invoked within a partition, 3) disregarding the ARF flag, 4) etc.

*user invoke diagnostic*

2. How does the invention solve the problem or achieve an advantage, (a description of "the invention", including figures inline as appropriate)?

The ARF flag provides the ability for an OS to determine if a global problem has already been reported to another partition. The OS can then process the problem differently if it so chooses.

3. If the same advantage or problem has been identified by others (inside/outside IBM), how have those others solved it and does your solution differ and why is it better?

Most other IBM systems do not have this problem because problem handling and reporting is done at the firmware level instead of the OS level. It is possible to handle the problems as done today and allow the

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application that receives the call home problem reports to filter the information there.

4. If the invention is implemented in a product or prototype, include technical details, purpose, disclosure details to others and the date of that implementation.  
Not been implemented to our knowledge.

**\*Critical Questions (Questions 1-8 must be answered)**

**\* Question 1**

On what date was the invention workable?  Please format the date as MM/DD/YYYY  
(Workable means i.e. when you know that your design will solve the problem)

**\* Question 2**

Is there any planned or actual publication or disclosure of your invention to anyone outside IBM?

☐ Yes  
☒ No

If yes, Enter the name of each publication or patent and the date published below.

Publication/Patent:

Date Published or Issued:

Are you aware of any publications, products or patents that relate to this invention?

☐ Yes  
☒ No

If yes, Enter the name of each publication or patent and the date published below.

Publication/Patent:

Date Published or Issued:

**\* Question 3**

Has the subject matter of the invention or a product incorporating the invention been sold, used internally in manufacturing, announced for sale, or included in a proposal?

☐ Yes  
☒ No

Is a sale, use in manufacturing, product announcement, or proposal planned?

☐ Yes  
☒ No

If Yes, identify the product if known and indicate the date or planned date of sale, announcements, or proposal and to whom the sale, announcement or proposal has been or will be made.

Product:

Version/Release:

Code Name:

Date:

To Whom:

If more than one, use cut and paste and append as necessary in the field provided.

**\* Question 4**

Was the subject matter of your invention or a product incorporating your invention used in public, e.g., outside IBM or in the presence of non-IBMers?

If yes, give a date. Please format the date as MM/DD/YYYY

☐ Yes  
☒ No

**\* Question 5**

Have you ever discussed your invention with others not employed at IBM?

☐ Yes  
☒ No

If yes, identify individuals and date discussed. Fill in the text area with the following information, the

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names of the individuals, the employer, date discussed, under CDA, and CDA #.

**\*Question 6**

Was the invention, in any way, started or developed under a government contract or project?

- ☐ Yes  
☒ No  
☐ Not sure

If Yes, enter the contract number

**\*Question 7**

Was the invention made in the course of any alliance, joint development or other contract activities?

- ☐ Yes  
☒ No  
☐ Not Sure

If Yes, enter the following :Name of Alliance, Contractor or Joint Developer

Contract ID number

Relationship contact name

Relationship contact E-mail

Relationship contact phone

**\*Question 8**

Have you submitted, or are you aware of, any related disclosure submission?

- ☐ Yes  
☒ No

If Yes, please provide the title and docket or disclosure number below:

**Question 9**

What type of companies do you expect to compete with inventions of this type? *Check all that apply.*

- ☒ Manufacturers of enterprise servers  
☒ Manufacturers of entry servers  
☐ Manufacturers of workstations  
☐ Manufacturers of PC's  
☐ Non-computer manufacturers  
☐ Developers of operating systems  
☐ Developers of networking software  
☒ Developers of application software  
☐ Integrated solution providers  
☒ Service providers  
☐ Other (Please specify below)

**Patent Value Tool (Optional - this may be used by the inventor and attorney to assist with the evalua**  
 (The Patent Value tool can be used by the inventor(s) to determine the potential licensing value of your invention.)

No PVT score has been calculated. To calculate a PVT score, press the 'Calculate' button.

**Market**

What is the anticipated annual market size (in dollars) that will be captured by your invention?

**CLAIMS**

Question 1 - How new is the technical field?

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**Question 2** - How central is the invention to the product(s) which might be expected to contain the invention?

**Question 3** - What is the scope of the claim?

**PORTFOLIO NEED**

What are the portfolio needs in the area of your invention?

**EXPLOITATION & ENFORCEMENT**

**Question 1** - How easily can the use of the invention by a competitor be detected?

**Question 2** - How easily can the use of the invention be avoided by a competitor?

**BUSINESS VALUE**

**Question 1** - What percentage of the companies producing products in the field of this invention might use this invention?

**Question 2** - What is the value of this patent to current or anticipated Alliance Activity between IBM and other companies?

**Question 3** - What is the value of this patent to current or anticipated Technology Transfer Activity between IBM and other companies?

**Question 4** - Does it result in prestige to IBM?

**Post Disclosure Text & Drawings**

Enter any additional information relating to this disclosure below:

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(Form Revised [REDACTED])